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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/593,912	06/14/2000	Yatin R. Acharya	E0897	8324

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EXAMINER

YAO, KWANG BIN

ART UNIT	PAPER NUMBER
2667	

DATE MAILED: 11/17/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/593,912

Applicant(s)

ACHARYA, YATIN R.

Examiner

Kwang B. Yao

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 June 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) 19-26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-18, drawn to a transmitting system, classified in class 370, subclass 422.
 - II. Claims 19-26, drawn to a receiving system, classified in class 370, subclass 463.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I and II are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions have different modes of operation in the transmitter and receiver.
3. Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group II, restriction for examination purposes as indicated is proper.
4. During a telephone conversation with Mark Saralino on 11/12/03 a provisional election was made without traverse to prosecute the invention of I, claims 1-18. Affirmation of this election must be made by applicant in replying to this Office action. Claims 19-26 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Claim Rejections - 35 USC § 102

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5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Engdahl et al. (US 5,493,571).

Engdahl et al. discloses an apparatus for digital communication comprising the following features: regarding claim 1, a system in a media access controller (Figs. 5A and 5B, REF 100) for communicating to a number of physical layer devices (Fig. 1, REF 12-16), comprising: a common bus port (Fig. 5A, REF 103) for electrical coupling to a common bus (Fig. 1 and Fig. 5A, REF 11) that is electrically coupled to the physical layer devices (Fig. 1, REF 12-16); logical circuitry to transmit a training sequence from the common bus port (Fig. 5A REF 103) to the physical layer devices (Fig. 1, REF 12-16); and logical circuitry (Fig. 5B, REF 141) to transmit a data block from the common bus port to a respective one of the physical layer devices by way of the common bus (Fig. 1 and Fig. 5A, REF 11), the data block being transmitted in one of a number of time slots of a time division multiplexed transmission; regarding claim 2, wherein the logical circuitry (Fig. 5B, REF 141) to transmit a training sequence from the common bus port further comprises logical circuitry to transmit a transmit enable signal (Fig. 7, TX ENABLE) from the common bus port (Fig. 5A, REF 103) simultaneously with the data block (Fig. 7, TX PHY SYMBOLS), thereby indicating a transmission of the data block to the physical layer devices (Fig. 1, REF 12-16); regarding claim 3, wherein the logical circuitry (Fig. 5B, REF 141) to transmit a training sequence from the common bus port (Fig. 5A, REF 103) to the physical

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layer devices (Fig. 1, REF 12-16) further comprises logical circuitry (Fig. 5B, REF 141) to transmit an address designation (Fig. 2A, REF 24) in each of the time slots (Fig. 3); regarding claim 4, wherein the logical circuitry to transmit a training sequence from the common bus port to the physical layer devices further comprises logical circuitry to transmit a predefined training sequence (Fig. 2A) that provides a reference for the time slots (Fig. 3); regarding claim 5, wherein each of the address designations (Fig. 2A, REF 24) is transmitted in a first portion of the corresponding time slot; regarding claim 6, wherein a predetermined sequence (Fig. 2A, REF 25) is transmitted in a second portion of the corresponding time slot; regarding claim 7, (as described on column 26-30), a system in a media access controller (Figs. 5A and 5B, REF 100) for communicating to a number of physical layer devices (Fig. 1, REF 12-16), comprising: a processor (Fig. 10, REF 400) coupled to a local interface (Fig. 5B, REF 143); a memory (Fig. 10, REF 411) coupled to the local interface (Fig. 5B, REF 143); a common bus port (Fig. 5A, REF 103) coupled to the local interface, the common bus port (Fig. 5A, REF 103) being adapted for electrical coupling to a common bus (Fig. 1 and Fig. 5A, REF 11) that is electrically coupled to the number of physical layer devices (Fig. 1, REF 12-16); and operating logic stored on the memory (Fig. 10, REF 411) and executable by the processor (Fig. 10, REF 400), the operating logic further comprising: logic (Fig. 10, REF 401) to transmit a training sequence from the common bus port to the physical layer devices; and logic (Fig. 10, REF 401) to transmit a data block from the common bus port to a respective one of the physical layer devices by way of the common bus, the data block being transmitted in one of a number of time slots of a time division multiplexed transmission; regarding claim 8, wherein the logic (Fig. 10, REF 401) to transmit a training sequence from the common bus port to the physical layer devices further comprises

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logic to transmit a transmit enable signal from the common bus port simultaneously with the data block, thereby indicating a transmission of the data block to the physical layer devices; regarding claim 9, wherein the logic (Fig. 10, REF 401) to transmit a training sequence from the common bus port (Fig. 5A, REF 103) to the physical layer devices (Fig. 1, REF 12-16) further comprises logic to transmit an address designation (Fig. 2A, REF 24) in each of the time slots; regarding claim 10, wherein the logic (Fig. 10, REF 401) to transmit a training sequence from the common bus port (Fig. 5A, REF 103) to the physical layer devices (Fig. 1, REF 12-16) further comprises logic to transmit a predefined training sequence (Fig. 2A) that provides a reference for the time slots (Fig. 3); regarding claim 11, wherein each of the address designations (Fig. 2A, REF 24) is transmitted in a first portion of the corresponding time slot; regarding claim 12, wherein a predetermined sequence (Fig. 2A, REF 25) is transmitted in a second portion of the corresponding time slot; regarding claim 13, a system in a media access controller (Figs. 5A and 5B, REF 100) for communicating to a number of physical layer devices (Fig. 1, REF 12-16), comprising: a common bus port (Fig. 5A, REF 103) coupled to the local interface (Fig. 3, REF 143), the common bus port (Fig. 5A, REF 103) being adapted for electrical coupling to a common bus (Fig. 1 and Fig. 5A, REF 11) that is electrically coupled to the number of physical layer devices (Fig. 1, REF 12-16); means for transmitting (Fig. 5A, REF 141) a training sequence from the common bus port (Fig. 5A, REF 103) to the physical layer devices (Fig. 1, REF 12-16); and means for transmitting (Fig. 5B, REF 141) a data block from the common bus port (Fig. 5A, REF 103) to a respective one of the physical layer devices (Fig. 1, REF 12-16) by way of the common bus (Fig. 1 and Fig. 5A, REF 11), the data block being transmitted in one of a number of time slots of a time division multiplexed transmission; regarding claim 14, wherein

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the means for transmitting (Fig. 5B, REF 141) a training sequence from the common bus port (Fig. 5A, REF 103) to the physical layer devices (Fig. 1, REF 12-16) further comprises means for transmitting a transmit enable signal (Fig. 7, TX ENABLE) from the common bus port simultaneously with the data block (FIG. 7, TX PHY SYMBOLS), thereby indicating a transmission of the data block to the physical layer devices (Fig. 1, REF 12-16); regarding claim 15, wherein the means for transmitting a training sequence from the common bus port to the physical layer devices further comprises means for transmitting an address designation (Fig. 2A, REF 24) in each of the time slots (Fig. 3); regarding claim 16, a method in a media access controller (Figs. 5A and 5B, REF 100) for communicating to a number of physical layer devices (Fig. 1, REF 12-16), comprising the steps of: transmitting a training sequence to the physical layer devices by way of a common bus (Fig. 1 and Fig. 5A, REF 11); and transmitting a data block to a respective one of the physical layer devices (Fig. 1, REF 12-16) by way of the common bus, the data block being transmitted in one of a number of time slots of a time division multiplexed transmission; regarding claim 17, wherein the step of transmitting a training sequence to the physical layer devices (Fig. 1, REF 12-16) by way of a common bus (Fig. 1 and Fig. 5A, REF 11) further comprises the step of transmitting a transmit enable signal (Fig. 7, TX ENABLE) to the physical layer devices (Fig. 1, REF 12-16) by way of the common bus (Fig. 1 and Fig. 5A, REF 11) simultaneously with the transmission of the data block, thereby indicating a transmission of the data block to the physical layer devices (Fig. 1, REF 12-16); regarding claim 18, wherein the step of transmitting a training sequence to the physical layer devices (Fig. 1, REF 12-16) by way of a common bus (Fig. 1 and Fig. 5A, REF 11) further comprises the step

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of transmitting an address designation (Fig. 2A, REF 24) in each of the time slots (Fig. 3). See column 5-36.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Keenan et al. (US 6,577,631) discloses a communicating switching module.

Lam et al. (US 6,130,891) discloses an integrated multiport switch.

Chung (US 6,122,667) discloses an integrated circuit.

Chung (US 6,012,099) discloses an integrated circuit.

Wakeman et al. (US 5,790,786) discloses a multi-media-access-controller.


Chung (US 5,764,895) discloses a one chip LAN device.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kwang B. Yao whose telephone number is 703-308-7583. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi H Pham can be reached on 703-305-4378. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

KWANG BIN YAO
PRIMARY EXAMINER


Kwang B. Yao
November 13, 2003